

REMARKS

In a communication dated March 27, 2008, the Power of Attorney was not accepted due to a missing Certificate required by 37 CFR 3.73(b). Accordingly, the required Certificate required by 37 CFR 3.73(b) is herein attached with this response.

In the Office Action dated March 27, 2008, the oath or declaration was objected to. A new declaration is submitted with this response. The two inventors refused to sign the new declaration. In various e-mails received from the inventors they both stated that the reason they refused to sign the new declaration was due to German remuneration issues. A Petition under 37 CFR 1.47(b), and supporting documentation are enclosed herewith.

The IDS dated April 23, 2007 was objected to for the placement of foreign patents in the "Non-Patent Literature Section". Cite No. A listed "German Patent Dated January 26, 2007 (3 Pages)", and has been replaced with the intended reference of DE 10392908 B4, published 10/25/2005 to Peter Rogall et al. A new IDS is filed herewith to address these matters, and to identify the foreign patents listed on the original IDS. Additional references that were uncovered after the receipt of the first office action have also been included.

The specification was objected to due to legal phraseology contained within the abstract of the disclosure. The abstract of the disclosure has been corrected and the legal phraseology has been removed or replaced with non-legal phraseology. The specification now contains section headings as requested by the Examiner. A clean copy of the specification and a marked up version showing the changes is enclosed herewith.

Claims 6-13 were objected to under 37 CFR 1.75(c) as being in improper form because of multiple dependent claim language. Claims 6-13 have been amended to remove the multiple dependent claim language. Reconsideration of these claims is respectfully requested.

Claims 1-3 were rejected under 35 USC 102(b) as being anticipated by Scholz et al. (USP 4,871,923). Claims 1-4 were rejected under 35 USC 102(b) as being anticipated by Schoo et al. (USP 6,232,673). Claims 1-4 were rejected under 35 USC 102(e) as being anticipated by ES 220,602 A1. Claims 1-3 were rejected under 35 USC 102(b) as being anticipated by DE 1991-6454 A1. Claim 5 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim. Applicant greatly appreciates the Examiner's statement in the previous Office Action with regard to the allowable claim.

With respect to the rejection of claims 1-3, the Examiner asserted that Scholz et al. (USP 4,871,923) teaches a first bearing ring 11,12,29 being fixed to support a support arrangement 3 in a torque proof manner and disposed co-axially with respect to said rotor axis, and a second bearing ring 11,12,29 being rotatably, with respect to said rotor axis, supported on said first bearing ring 11,12, 29 and fixed to said rotor hub 2. In Figure 1 of Scholz et al. '923, the two bearings 11 and 12 are axially spaced from one another and do not rotate against each other. In Figure 2 of Scholz et al. '923, the two bearings 28 and 29 are also axially spaced from one another and do not rotate against each other. While bearings 11 and 12 (or 28 and 29) may be seen as co-axial, but they are not substantially co-radial so that they can rotate against each other. The bearing rings 22 and 24 of the present invention are co-axial and substantially co-radial so that the two bearing rings 22 and 24 (of the present invention) may rotate against each other. The bearings 11,12,29 of Scholz et al. '923 are fixed in the same manner to hub 2. Conversely, the

bearing ring 24 of the present invention is fixed to front flange 42, and bearing ring 22 is fixed to rotor hub 10. In addition, the second bearing ring 22 of the present invention is supported on the first bearing ring 24. In contrast, the second bearing ring 12 of Scholz et al. '923 is not supported on the first bearing ring 11, as they are substantially axially spaced away from each other.

With respect to the rejection of claims 1-4, the Examiner asserted that Schoo et al. (USP 6,232,673) teaches a first bearing ring 6 being fixed to support a support arrangement 4 in a torque proof manner and disposed co-axially with respect to said rotor axis, and a second bearing ring 7 being rotatably, with respect to said rotor axis, supported on said first bearing ring 6 and fixed to said rotor hub 2. The two bearing rings (6 and 7, Fig. 2) of Schoo et al. '673 appear to be co-axial and co-radial. However, bearing ring 6 is connected via rotor support 4 to a mast or tower (not shown), and bearing ring 7 is connected via bolts 8 to gearbox housing 15. A disadvantage of the Schoo et al. '673 device is that operational shearing and tilting moments are absorbed by inner bearing ring 7 and transferred to the gearbox via housing 15. In the present invention, the weight of the hub as well as operational shearing and tilting moments are substantially absorbed by outer bearing ring 24, whereas torque is transmitted via inner bearing ring 22. The bearing rings of the present invention also enable maintenance staff to pass through openings in one of the bearing rings (22 or 24) to enable safe transit into the hub 10. This type of access for maintenance staff is not possible in the device of Schoo et al. '673.

With respect to the rejection of claims 1-4, the Examiner asserted that Torres Martinez (ES 2206028 A1) teaches a first bearing ring (inherently) being fixed to support a support arrangement 1 in a torque proof manner and disposed co-axially with respect to said rotor axis, and a second bearing ring (inherently) being rotatably, with respect to said rotor axis, supported on said first bearing ring and fixed to said rotor hub 3. Applicant respectfully points the

Examiner's attention to Torres Martinez (USP 6,759,758 B2) for the US counterpart of Torres Martinez (ES 2206028 A1), as it may assist in identifying specific elements of the apparatus. The Torres Martinez wind turbine incorporates two bearings 12 and 13 (see Fig. 2). Bearing 12 is mounted on the boss 10 and by means of this attachment is made onto support 14 that is joined to the casing of the body 1. The other bearing 13 is mounted on the shaft 7 on its forward part, between the shaft 7 and the casing of the body 1. Refer to the '758 patent column 3 lines 32-38. Bearings 12 and 13 may appear to be co-axial, but they are not substantially co-radial so that they can rotate against each other. The bearing rings 22 and 24 of the present invention are co-axial and substantially co-radial so that the two bearing rings 22 and 24 (of the present invention) may rotate against each other. The bearing rings and torque transmission arrangement of the present invention also enable maintenance staff to pass through openings in one of the bearing rings (22 or 24) to enable safe transit into the hub 10. This type of access for maintenance staff is not taught or disclosed in the device of Torres Martinez '028.

With respect to the rejection of claims 1-3, the Examiner asserted that Schoo (DE 19916454 A1) teaches a bearing arrangement 21 having a first bearing ring (inherently) being fixed to support a support arrangement 10 in a torque proof manner and disposed co-axially with respect to said rotor axis, and a second bearing ring (inherently) being rotatably, with respect to said rotor axis, supported on said first bearing ring and fixed to said rotor hub 2. In Figure 2 of Schoo '454, the two bearings 21 are axially spaced from one another and do not rotate against each other. Bearings 21 may appear to be co-axial, but they are not substantially co-radial so that they can rotate against each other. The bearing rings 22 and 24 of the present invention are co-axial and substantially co-radial so that the two bearing rings 22 and 24 (of the present invention) may rotate against each other. The bearing rings of the present invention also enable

maintenance staff to pass through openings in one of the bearing rings (22 or 24) to enable safe transit into the hub 10. This type of access for maintenance staff is not disclosed or taught by Schoo '454.

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are respectfully requested.

Should the Examiner believe that anything further is needed to place the application in even better condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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